

PATENT ABSTRACTS OF JAPAN

(11)Publication number : 10-073501

(43)Date of publication of application : 17.03.1998

(51)Int.Cl.

G01L 5/16
G01M 17/02

(21)Application number : 09-180133

(71)Applicant : BAYERISCHE MOTOREN WERKE
AG

(22)Date of filing : 04.07.1997

(72)Inventor : MAXIMILIAN KUCHLER
MEIER HUBERT
NOHL FRIEDRICH
FERRUFINO-CAMACHO DAVID
ALFRED

(30)Priority

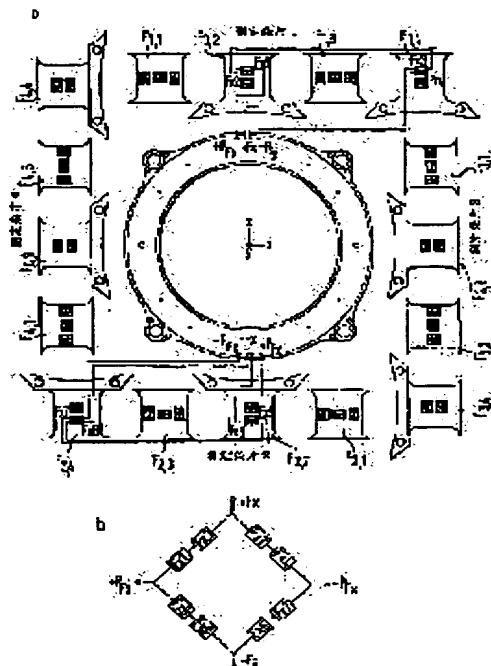
Priority number : 96 19627385 Priority date : 06.07.1996 Priority country : DE

(54) WHEEL MEASURING HUB

(57)Abstract:

PROBLEM TO BE SOLVED: To obtain a wheel measuring hub by which all forces and all moments can be detected precisely without being influenced mutually and by which especially the speed of rotation of a wheel can be detected with high resolution by a method wherein strain gages are arranged, directed and connected in such a way that all the forces and all the moments can be detected via a shear stress generated when a load is applied.

SOLUTION: When a longitudinal force F_x is detected, eight strain gages are installed at the front and the rear of a measuring stripe piece 1 and a measuring stripe piece 2. When a wheel support force F_z is measured, eight strain gages are installed at the front and the rear of a measuring stripe piece 3 and a measuring stripe piece 4. When a side force F_y is measured, 16 strain gages are bonded to the left side and the right side in central parts of all measuring stripe pieces. When the signal of a camber moment M_x is recorded, the measuring stripe pieces 1, 2 are used. Four strain gages are connected respectively to the left side and the right side of them, the measuring stripe pieces 3, 4 are applied to the measurement of a restoring moment M_z , and the signal of a braking and driving moment M_y is detected by 16 strain gages which are bonded to the front and the rear of all the measuring stripe pieces. The strain gages constitute respectively a Wheatstone bridge so as to stop a cross talk.



LEGAL STATUS

BEST AVAILABLE COPY

[Date of request for examination]

[Date of sending the examiner's decision of rejection]

[Kind of final disposal of application other than the examiner's decision of rejection or application converted registration]

[Date of final disposal for application]

[Patent number]

[Date of registration]

[Number of appeal against examiner's decision of rejection]

[Date of requesting appeal against examiner's decision of rejection]

[Date of extinction of right]

Copyright (C); 1998,2003 Japan Patent Office